

Title (en)  
Heat exchanger tubes of elongate cross-section

Title (de)  
Wärmetauscherrohr mit länglichem Querschnitt

Title (fr)  
Tubes d'échangeur de chaleur, à section allongée

Publication  
**EP 0717251 A3 19970709 (EN)**

Application  
**EP 95308942 A 19951208**

Priority  
US 35393994 A 19941212

Abstract (en)  
[origin: US5511613A] An elongated heat exchanger tube has an internally located stiffener assembly which prevents the deflection of the tube wall due to pressure differentials between the tube internal and external surfaces while allowing the flow of fluid between the areas on opposite sides of the stiffener inside of the tube. The heat exchanger tube can have an elliptical, oval or flat cross-section. The internal stiffener can have a variety of cross-sectional configurations having uniform or non-uniform shapes.

IPC 1-7  
**F28F 1/02**

IPC 8 full level  
**F16L 9/04** (2006.01); **F28F 1/02** (2006.01); **F28F 1/40** (2006.01)

CPC (source: EP US)  
**F28F 1/02** (2013.01 - EP US); **F28F 2225/04** (2013.01 - EP US); **Y10S 165/537** (2013.01 - EP US); **Y10S 165/906** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**US 5511613 A 19960430**; CA 2164930 A1 19960613; CA 2164930 C 19981117; EP 0717251 A2 19960619; EP 0717251 A3 19970709;  
JP 2895432 B2 19990524; JP H08296987 A 19961112

DOCDB simple family (application)  
**US 35393994 A 19941212**; CA 2164930 A 19951211; EP 95308942 A 19951208; JP 34434895 A 19951206